AUG#18-04

REMARKS

Reconsideration of the application is requested in view of the above amendments and the following remarks. Claim 6 has been amended. Amendments to claim 6 are supported by Figures 4 and 5 and the description of those figures at pages 7-10 of the current specification. Figure 4 illustrates the correction coil 8 forming a bipolar magnetic field in order to generate a preliminary deflection force. The cores 5 on the left and right sides as shown in Figure 5 are disposed so that mutually parallel forces are opposed to each other, and the magnetic field 51 formed therebetween is substantially straight. As a result, the forces acting on the electron beams are uniform as shown by the arrows that have the same length in Figure 5.

Claim 6 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Kobayashi (U.S. 4,818,919). Applicants respectfully traverse this rejection.

Kobayashi relates to the correction of coma errors. Kobayashi discloses with reference to Figure 4 that in order to correct a coma error, two pairs of sub-coils 52A, 52B, and 62A, 62B form a 6-pole magnetic field. The subcoils 62A, 62B on the left and right sides adjust the 6-pole magnetic field. The 6-pole magnetic field provides different forces in the vertical direction that act upon each of the center beam (18G) and the side beams (18R and 18B), which enables the correction of a coma error. Therefore, as illustrated in Figure 4, the magnetic field formed between the sub-coils 62A, 62B on the left and right sides is a barrel-shaped magnetic field with a central portion that swells in the vertical direction. Thus, Kobayashi fails to disclose or suggest providing the electron beams, by a substantially uniform magnetic field, with a substantially uniform preliminary deflection force in a vertical direction, as required by claim 6.

Furthermore, although the deflection prior to principle deflection may be referred to as "preliminary deflection" in a broad sense, the preliminary deflection force of claim 6 can be clearly distinguished from the 6-pole magnetic field disclosed by Kobayashi (described above). Kobayashi discloses that since the forces from the sub-coils 62A, 62B do not act upon the three electron beams 18B, 18G, 18R uniformly, the action by the "preliminary deflection" as provided by claim 6 cannot be obtained. Referring again to Figure 4 of Kobayashi, the tip ends of the subcoils 62A, 62B on the left and right sides are pointed. Such a shape for a magnetic pole

cannot produce a uniform magnetic field. Therefore, Kobayashi fails to disclose or suggest all of the limitations of claim 6 for this additional reason.

Kobayashi also discloses that a coma error is corrected by the action of a 6-pole magnetic field only, wherein the magnetic field is provided by the two pairs of subcoils 52A, 52B and 62A, 62B. Kobayashi fails to disclose or suggest "a deflection yoke . . . deflecting said electron beams; and a correction coil . . . providing said electron beams, by a substantially uniform magnetic field, with a substantially uniform preliminary deflection force in a vertical direction," as required by claim 6. Because Kobayashi fails to disclose the use of a deflection yoke and a preliminary deflection force to provide a correction, Kobayashi fails to disclose or suggest every limitation of claim 6 for this further reason.

In view of the above, Applicants request reconsideration of the application in the form of a Notice of Allowance.

Respectfully submitted,

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Date: August 18, We4

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